

Toshiaki AONO, *et al.*
RESPONSE UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 10/765,929

copending Application No. 10/767,062¹ in view of Hanaki et al. (US 2005/0073563) and Ito et al. (U.S. Patent No. 6,509,125).

Applicants hereby submits a Terminal Disclaimer. Accordingly, it is believed that the rejection is moot.

Rejection under 35 U.S.C. § 112, Second Paragraph

Claims 17, 19 and 20 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being incomplete for omitting essential elements, such omission amounting to a gap between the elements. In particular, the Office Action states that Claim 1 recites “at least one structural unit represented by A, C, or D” and thus not all three structural units are necessary in the invention. Therefore, the Office Action further asserts, Claims 17, 19 and 20² each claiming A, B, and D, independently, are not necessarily part of the invention.” Applicant respectfully traverse the rejection.

First, Applicants note that there is an error in the Office Action stating that Claim 1 recites “at least one structural unit represented by A, C, or D.” Claim 1 states “at least one structural unit represented by A, B and D.”

Assuming that the Office Action’s point is that Claim 1 alternatively claims unit A, C or D, Applicant respectfully submit that there is no rule of prohibiting alternative recitations. Furthermore, a dependent claim may state additional limitations or further describe any elements recited in an independent claim or other dependent claim(s).

¹ It appears that the Office Action erroneously cited Serial No. 10/797,062 for 10/767,062.

² It appears that the Office Action erroneously indicated Claims 9, 11, and 12, on page 5.

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Accordingly, Claims 17, 19 and 20 of the present application comply with section 112, second paragraph by further describing structural unit A, C and D, respectively, which are recited in Claim 1. Therefore, it is believed that the rejection is not sustainable and respectfully requested that the rejection be withdrawn.

Rejections under 35 U.S.C. § 103(a)

Claims 1-5, 9-19, and 21-24 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera (JP 10/095942) in view of Ishizuka et al. (JP 2001/181,548) and Kimura et al. (U.S. Patent No. 6,521,031). It is stated that one skilled in the art would have been motivated to replace water-soluble dyes of Kubodera with an oil-soluble dyes and add an oil-soluble polymer to improve the quality of the an solution and increase the ink stability. Applicants respectfully traverse for the following reasons.

Claims 6 and 7 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera, Ishizuka and Kimura in further view of Yabuki et al. (U.S. Patent Publication No. 2002/0067399). It is stated that one skilled in the art would have been motivated to replace water-soluble dyes of Kubodera with an oil-soluble dyes and add an oil-soluble polymer to improve the quality of the an solution and increase the ink stability. Applicants respectfully traverse for the following reasons.

Claim 8 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera, Ishizuka et al. (JP 2001/181,548) (“Ishizuka ‘548”) and Kimura in further view of Ishizuka et al. (U.S. Patent Publication No. 2002/088294) (“Ishizuka ‘294”). It is also stated that one skilled in the art would have been motivated to replace water-soluble dyes of Kubodera

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with an oil-soluble dyes and add an oil-soluble polymer to improve the quality of the an solution and increase the ink stability. Applicants respectfully traverse for the following reasons.

Claim 20 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera, Ishizuka ‘548 and Kimura in further view of Leppard et al. (U.S. Patent No. 6,048,060). It is stated that one skilled in the art would have been motivated to replace water-soluble dyes of Kubodera with an oil-soluble dyes and add an oil-soluble polymer to improve the quality of the an solution and increase the ink stability. Applicants respectfully traverse for the following reasons.

Claims 25, 27, 29 and 34 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera in view of Ishizuka ‘548 and Ito et al (U.S. Patent No. 6,509,125). It is also stated that one skilled in the art would have been motivated to replace water-soluble dyes of Kubodera with an oil-soluble dyes and add an oil-soluble polymer to improve the quality of the an solution and increase the ink stability. Applicants respectfully traverse for the following reasons.

Claims 26, 29, and 33 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera, Ito and Kimura in further view of Ishizuka ‘548. It is also stated that one skilled in the art would have been motivated to replace water-soluble dyes of Kubodera with an oil-soluble dyes and add an oil-soluble polymer to improve the quality of the an solution and increase the ink stability. Applicants respectfully traverse for the following reasons.

Claims 30 and 32 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera, Ito and Kimura in further view of Yabuki. The Office Action also

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states that one skilled in the art would have been motivated to replace water-soluble dyes of Kubodera with an oil-soluble dyes and add an oil-soluble polymer to improve the quality of the an solution and increase the ink stability. Applicants respectfully traverse it for the following reasons.

Claim 31 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera, Ito and Kimura et al (U.S. Patent No. 6,521,031) in further view of Ishizuka '294. It is also stated that one skilled in the art would have been motivated to replace water-soluble dyes of Kubodera with an oil-soluble dyes and add an oil-soluble polymer to improve the quality of the an solution and increase the ink stability. Applicant respectfully traverse for the following reasons.

As described in the specification of the present application, aqueous inks have a problem of poor dispersion stability of the pigment or the disperse dye therein, and clogging has tended to occur frequently at an ink discharge opening.” *See*, page 2, lines 13-17 of the specification. The present invention provides a solution to solve the problem of shelf stability by incorporating the compounds represented by formula (I) into the ink in which colored fine particles are dispersed in such an aqueous medium.

Kubodera discloses an ink which has excellent spreading performance on a recording paper, and which is free from the occurrence of ejection failure and irregular scattering. However, Kubodera does not teach or suggest an ink having fine particles dispersed therein, and also does not disclose the effect of an ink including fine particles on shelf stability. The superior ejection stability of the present invention implies that dispersion stability is maintained, for

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example, even if the ink is left to stand in a cartridge for one month as shown in the Examples of the present invention. Kubodera does not teach or suggest the features of the present invention and superior effects attributed to the features.

Ishizuka and Kimura disclose oil-soluble dyes, fine particles including an oil-soluble polymer, and an ink including the same. However, Ishizuka and Kimura do not disclose any of the polymers represented by formula (I) which is a feature of the claimed invention. Nor do they teach or suggest the dispersion stability of the ink when the ink including the fine particles is preserved.

Kubodera uses a specific polymer merely to obtain spreading performance of an ink in which dyes are dissolved. Thus, it would be difficult to find any reason or motivation to replace an aqueous ink with a pigment or a dispersion ink known to have poor dispersion stability. *See*, page 2, lines 16-20 of the specification (“There have also been problems that the ink using the pigment and the disperse dye is not easily absorbed by photographic paper, and that in consequence the pigment or the dye is easily removed from the surface when rubbed by hand.”).

Therefore, the presently claimed invention is not obvious over the references in view of the distinctions discussed above. It is respectfully requested that the rejections under 35 U.S.C. § 103(a) be withdrawn.

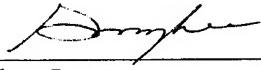
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

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Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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